

7-16 In-Series and Between-Series Adapters

2705, 2706, 2707 and 2712 Series

Description

These adapters are precision 7-16 to 3.5mm, 7mm, type N or 7mm connectors which cover the frequency ranges from DC to 7.5 GHz. They are fabricated from stainless steel and beryllium copper alloy to provide a rugged, long-wearing and highly repeatable interface with very low VSWR. These characteristics make them ideal for use in laboratory measurement environments and in wireless applications.

Adapters in the same model series are phase matched so that they can be readily interchanged for VNA measurement of non-insertable devices. Maury also supplies these adapters in sets, and together with a full complement of calibration standards in the 2750 series VNA calibration kits (see page 40–41).

7-16 Connector Description

The Maury 7-16 interface is designed to provide a standard test interface that is tighter controlled than the grade "0" standard test connectors specified by European Standard EN 122190 and British Standard BSEN 122190. This interface also complies with the requirements of the "Reference Connector" specified in IEC standard publication 169-4 and is designed to be used as a test connector for all devices which use the general purpose 7-16 connector described in all three standards. Recommended torque value when mating these connectors to themselves or to general purpose 7-16 connectors is 20.0 in/lb. (See Maury data sheet 5E-066 for interface dimensions.)



Available Models

MODEL	ADAPTS		FREQUENCY RANGE (GHz) AND MAXIMUM VSWR	NOMINAL IMPEDANCE	INSERTION LENGTH INCHES (CM)	
	SIDE A	SIDE B				
2705A	7-16 female ¹	3.5mm female ²	DC — 7.5 ≤ 1.04	50 ohm	2.45	(6.21)
2705B	7-16 female ¹	3.5mm male ²				
2705C	7-16 male ¹	3.5mm female ²				
2705D	7-16 male ¹	3.5mm male ²				
2707A	7-16 female ¹	7mm ³	DC — 7.5 ≤ 1.03	50 ohm	2.56	(6.50)
2707B	7-16 male ¹	7mm ³				
2707C *	7-16 male ^{1,5}	7mm ³				
2706A	7-16 female ¹	Type N female ⁴	DC — 7.5 ≤ 1.03	50 ohm	2.86	(7.26)
2706B	7-16 female ¹	Type N male ⁴				
2706C	7-16 male ¹	Type N female ⁴				
2706D	7-16 male ¹	Type N male ⁴				
2706E *	7-16 male ^{1,5}	Type N female ⁴				
2706F *	7-16 male ^{1,5}	Type N male ⁴				
2712A	7-16 female ¹	7-16 female ¹	DC — 7.5 ≤ 1.025	50 ohm	1.83	(4.65)
2712B	7-16 male ¹	7-16 male ¹				
2712C	7-16 female ¹	7-16 male ¹				

* Special short-face design made to facilitate a proper connect with air lines.

¹ Precision 7-16 per Maury data sheet 5E-066.

³ Precision 7mm per Maury data sheet 5E-060.

⁵ Test port adapter for use with precision 7-16 beadless air lines.

² Precision 3.5mm per Maury data sheet 5E-062.

⁴ Precision type N per Maury data sheet 5E-049.

Key Literature: Maury data sheet 2B-080, 2B-081, 2B-082 and 2B-083.